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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,756	03/13/2001	Gary Lynn Eesley	DP-301709	2710

7590 07/08/2003
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EXAMINER

PATEL, NIHIR B

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 07/08/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/804,756

Applicant(s)

EESLEY ET AL.

Examiner

Nihir Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on February 18th, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 8-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 21-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). 10.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____.

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DETAILED ACTION

Double Patenting

1. Claims 1-7 and 21-28 are directed to an invention not patentably distinct from claim 1-16 of commonly assigned patent 6,424,529 and claims 1-19 of commonly assigned patent 6,424,531. Specifically, claims 1-7 and 21-28 of US application differ from claims 1-16 of US patent 6,424,529 and claims 1-19 of US patent 6,424,531 only in scope of the claimed invention.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kuzay Patent No.

5,123,982. Kuzay discloses a process of making cryogenically cooled high thermal performance crystal optics that does comprise a heat spreader plate 20 or 21 (see figure 2 and column 3 lines 50-55) to which the components to be cooled are connected; at least two heat conducting fins (see figure 2; the gap between channels 23) that are positioned substantially parallel to one another and which are connected substantially perpendicular to the heat spreader plate; and at least one foam block 12 (see figure 2; see column 3 lines 20-32) that is disposed in the space between the parallel fins wherein the block is formed of reticulated foam to define a highly porous, heat conducting, open-celled structure that permits a cooling fluid to flow through the block as the cooling fluid passes across the fins (see figure 2).

Referring to claims 2 and 21, Kuzay discloses a process of making cryogenically cooled high thermal performance crystal optics that does comprise fins (the area between the channels) and the foam blocks that are connected to one surface of the heat spreader plate (see figure 2).

Referring to claim 5, Kuzay discloses a process of making cryogenically cooled high thermal performance crystal optics that does comprise heat spreader plate 20 or 21 (see figure 2), the fins (see figure 2; the area between the channels), and the at least one foam block 12 (see

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figure 2) are made from the same or different thermal conducting materials (see column 3 lines 1-30).

Referring to claim 22, Kuzay discloses a process of making cryogenically cooled high thermal performance crystal optics that does comprise foam blocks that is further defined as plurality of foam blocks (see figure 2).

Referring to claims 23 and 26, Kuzay discloses a process of making cryogenically cooled high thermal performance crystal optics that does comprise fins (area between the channels; see figure 2) that are connected to the heat spreader plate 20 or 21 through thermal bonding (see column 3 lines 50-55).

Referring to claims 24, 25, 27, and 28, Kuzay discloses a process of making cryogenically cooled high thermal performance crystal optics that does comprise fins (area between the channels; see figure 2) that are connected to the foam blocks 12 through thermal bonding (see figure 2 and column 2 lines 55-60).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuzay US Patent No. 5,123,982 in view of Elwell US Patent No. 5,315,154.

Kuzay discloses the applicant's invention as claimed with the exception of providing a heat spreader plate, fins, and at least one foam block that is made from aluminum.

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Elwell discloses an electronic assembly that includes heat absorbing material for limiting temperature through isothermal solid-solid phase transition that does provide a heat spreader plate, fins, and at least one foam block that is made from aluminum. Therefore it would be obvious to modify Kuzay's invention by providing a heat spreader plate, fins, and at least one foam block that is made from aluminum in order to increase the cooling process.

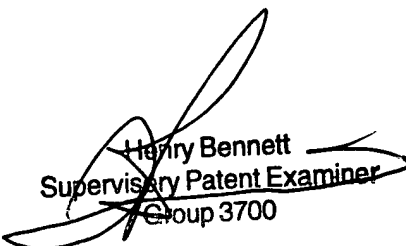
Referring to claims 3 and 4, the applicant claims an equation used to determine the height and spacing of the fins. It is obvious to one in the ordinary skill of the art that the height and spacing of the fins are a matter of design choice since the height and spacing of the fins depends on the environment the invention is being used in.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Nihir Patel whose telephone number is (703) 306-3463. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful the examiner supervisor Henry Bennett can be reached at (703) 308-0101.

NP
June 18, 2003


Henry Bennett
Supervisory Patent Examiner
Group 3700